# SINCLAIR COMPUTER USERS SOCIETY

SINCUS will leave messages on HAM-BONE BBS-(607)754-7498 "J-8" 8-N-1 24hrs 3-1200B

Thanks to George Penney, Don Lamen, and Warren Fricke for their help with the input
to this edition.

SINCUS DISC/tape SWAPS for the TS2068 are still growing- five discs  available  and
the sixth under construction. Available in Oliger or  Larken  Formats  ONLY  in  40
track, 5.25" discs. Get all five for $10.00, or $2.50 per disc for orders less than
5 discs. Special deal- one swap disc for $1.00 and  three  Public  Domain  programs
(YOURS or outa a magazine and give credit where due- send for list of our programs,
dupilcates don't count).
Send for disc catalogs, enclose an SASE. Send for a Sample disc and catalog enclose
$2.00.
For Oliger (DDDS 5.25" only) swaps write John  Colonna,  28  Guilfoyle  Ave.,
Binghamton, NY 13903.
For LKDOS (DDDS 5.25" only) swaps write to Paul  Hill,  1229  Rhodes  Rd.,  Johnson
City, NY 13790. Make checks payable to SINCUS.

"CLONE"- a TS2068 tape copier (2 modes) and a header reader. On other side of  tape
are a couple swap samples. (TAPE ONLY) $5. PPD.

COMPUTUS INTERRUPTUS- a multipart article on the 2068, includes programs,  projects
and artwork. Printed out, over 60 pages. One printed copy left only $15 PP.  Also
available on LKDOS and Oliger discs - 5.25 DSDD only $5.  Make  checks  to  SINCUS,
write to Paul Hill, 1229 Rhodes Rd., Johnson City, NY 13790.

Work on swap 106 continues, however  there  have  NOT  been  a  lot  of  programs
submitted, none in, none out. How about a program on when to  buy  or  sell  stock,
just a simple one, and someone else could modify it,  and  soon  we  all  could  be
making the BIG bucs!

# The Great TS Garage/Porch/Lawn SALE!

18    Profile Pac- cartridge, cassette V.3 and V.5, book, docs............$60.00

19    Basic Bag - Kruncher, Tracer, BasicTool Kit, Clone, Pro
   Tool Kit cartridge, UpLoad 2000.................................$45.00

20    This and that pac - ZXpert, Tasword 2, Mscript, Zprint80
   Smartext, Tasman IF, driver sw. and Tasword/Mscript QuickKey overlays..$70.00
   Artworx1.1, Sprites 2068

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Terms: Following terms are good until <u>April 30, 1990</u>

1.    If you are a current SINCUS member, take 10% your total purchase (if under
$200, if over see term 2.)
2.    Take 20% off the total price with the purchase of $200 or more.  SINCUS
members, if your total before discount is over $200 take take a total of 30% of
the sales total.
3.    Shipping and handling included. <u>All items sold as is, all sales final, no
returns</u>. All sales are on a first come first serve basis. You may wish to add a 2d
or 3d preference, any over payment will be returned. All software is orginial with
docs.
4.    Money orders preferred; make payable to "Paul Hill". Orders mailed next day
when possible. Checks will require up to 4 weeks to clear, before orders will be
mailed. Please insure your name and address is printed CLEARLY!
5.    Books, newsletters and additional material included with sale are selected by
me and are distributed on a first come first serve basis.

This sale is being handled by the undersigned, not the club SINCUS. All proceeds,
less expenses, will be turned over to SINCUS.

                              Paul Hill
                              1229 Rhodes Rd.
                              Johnson City, NY 13790
                              (607)-798-7219
<------------>Any questions, please included a SASE for a reply<------------------>

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## NOT YOUR AVERAGE PC

        The program listing on page 5, illustrates some of the
    reasons why I am still a Timex Fan. This is the program I use to
    compose this article (LETS HEAR IT FOR CLIVE SINCLAIR). Note how
    short it is. Look at Line 300. Not many a PC allows you to print
    an entire text with one instruction. Even machine code would
    require more memory. Look at Line 91. See how easy it is to
    insert a word within a text.
        However the Timex is not completely perfect. It is
    difficult to save the text without saving the program also. But
    think of how many back-up copies I have of my program.
                                    George Penney, SINCUS

# The Great TS Garage/Porch/Lawn SALE!

All items sold as is, <u>ALL SALES FINAL</u>, no returns. All sales are on a first come first serve basis. You may wish to add a 2d or 3d preference, any over payment will be returned.

| Item # | Description | Sale Price |
|---|---|---|

1    ZX80 w/manual, 22 cassettes, docs, cables, ps, books
SYNTAX newsletters and ZX Printer with aluminized paper...............$150.00

2    TS1000, w/ raised keys, ps, manual, 13 programs, 16K RAM,
Alphacom printer/13 paper rolls,3 books, newsletters, case
8K ROM upgrade with docs included, not installed.......................$60.00

3    TS1500, ps,schematic, GE Data Recorder, w/Winky board,
11 programs, 3 books, SYNTAX, carrying case, 16K Ram...................$70.00

4    TS2068,  **SOLD**

5    FDD3000 disc system (Zebra) w/ CP/M option, manual, I/F
15 discs, CP/M and TOS on disc. FDD Express Newsletters...............$320.00

6    Modem, 2050 in case, with 6 cassettes of telecom programs...........$90.00

7    TS1000   with 16K Memotech RAM, cables, PS, 4 books(no manual).......$20.00

8    ZX81  with 16K RAM pac, cables, PS, 3 books(no manual)..............$20.00

--------following items are for the TS2068 machine--------------------

9    Hard/Software Package A - a 32K NVM memory board, Cross
Assembler, Timachine, Super Hot Z, Intro to 2068 M.C. by
Dr. L. Dreger, Hot Z, Hot Z Names, 2068 Tech Manual...................$120.00

10   Hard/Software Package B - a 32K NVM memory board, Zeuss Assembler,
Zip Compiler, Compass, 2068 ROM Manuscript by Dr. L. Dreger ..........$100.00

11   Speech Package - Z talker, 3 programs..............................$40.00

12   Spectrum Rom switch, spectrum emulator, Spectrum s/w
MC Tutor, Spec Monitor, Assembler, DLAN.............................$150.00

13   Game/Graphics Pac -  **SOLD**

14   OS-64 cartridge, Utilities s/w, Personnel Secretary................$45.00

15   Pixel Print Package, **SOLD**

16   Music package, 2 programs, 2 books.................................$15.00

17   Hardware pac - Eprom player, 2 I/O port boards, ZAD broard,
Pseudoscope, Load Monitor,Byte Back Clock and RS232, Data Program.....$110.00

```
1500 REM ## GENERATE ÷ SYMBOL
1510 FOR T=USR "a" TO USR "a"+7
1520 READ w: POKE T,w: NEXT T
1530 DATA 0,24,0,255,0,24,0,0
1540 RETURN
```

You are expected to be correct in the first 6 significant figures to be marked correct.

QUESTION No. 1
  33 ÷ 77.8318 = 0.423991
   Correct.  Press ENTER.

QUESTION No. 2
  116.6 ÷ 12.9 = 9.03872
   Correct.  Press ENTER.

QUESTION No. 3
  209 ÷ 3.79436 = 55.182
   Wrong.  Answer is 55.081753
   Press ENTER.

---

## LETS HEAR IT FOR CLIVE SINCLAIR

HAVING RECENTLY PURCHASED AN OLD
IBM 5110 (TO GET A MORE CAPABLE
PRINTER) I HAVE AN EVEN GREATER
APPRECIATION FOR THE SINCLAIR;
NOT MERELY BECAUSE OF PRICE (THE
IBM 5110 ORIGINALLY COST TENS OF
THOUSANDS). ALTHOUGH BOTH THE
IBM 5110 AND THE TIMEX 1000 ARE
OBSOLETE, THE SINCLAIR SYSTEM
HANDLED DATA IN A MORE EFFECTIVE
WAY IN SOME RESPECTS THAN THE
LATEST PC.
   THE BIG PLUS FOR THE TIMEX IS
ITS SIMPLICITY. THIS IS DUE ONLY
IN PART TO ITS LACK OF DISK CAP-
ABILITY. EXTERNALLY, THE TIMEX
FILE IS A SINGLE READING FROM
TAPE. HOWEVER, IN THE IBM 5110
...EN A TAPE FILE MUST BE STRUCT-
URED IN ADVANCE.
   OTHER SIMPLIFICATIONS RESULT
FROM DEALING WITH DATA IN MEMORY
AS ONE CONTINUOUS STRING. FOR
EXAMPLE, A WHOLE FILE CAN BE
REFERRED TO BY A SINGLE NAME
WHEREAS THE IBM 5110 LIMITS A
STRING TO 255 BYTES. LIKEWISE
THE SINCLAIR ALLOWS COMPLETE
FLEXIBILITY IN DIMENSIONING AND
REDIMENSIONING CHARACTER ARRAYS.
WITH THE IBM 5110, IF A DIMENS-
ION IS NOT SPECIFIED IT IS AUTO-
MATICALLY 18 BYTES. IF A DIMENS-
ION IS SPECIFIED, IT CAN NOT BE
CHANGED TO A LARGER DIMENSION
LATER IN THE PROGRAM.
   HOWEVER, WHAT I LIKE MOST
ABOUT THE SINCLAIR SYSTEM IS
THAT BASIC IS TRULY BASIC. NOW
THAT I HAVE READ THE INSTRUCT-
ION MANUAL IT LIES ON THE SHELF
GATHERING DUST. WITH OTHERS I
HAVE TO KEEP REFERENCES AT HAND
TO LOOK UP THE INTRICACIES IN
WRITING WHAT IS SUPPOSED TO BE
A BEGINNERS CODE.
   SO LETS HEAR IT FOR CLIVE.

GEORGE PENNEY

```
  1 GOTO 990
 80 LET D$=D$( TO N-I)+D$(N+I T
O )
 81 LET N=N-I
 82 RETURN
 90 INPUT W$
 91 LET D$=D$( TO N)+W$+D$(N+I
TO )
 92 RETURN
 99 LET F$=""
100 SCROLL
101 INPUT L$
102 PRINT L$
103 LET F$=F$+L$
104 GOTO 100
200 LET P1=I-L
210 LET P1=P1+L
211 SCROLL
220 PRINT AT 20,0;F$(P1 TO P1+L
-I);"▓"
221 PAUSE 4E4
222 IF CODE INKEY$=112 OR CODE
INKEY$=118 THEN GOTO 210
223 LET N=L
224 LET P2=P1+L
225 LET D$=" "+F$(P1 TO P2-I)
230 IF CODE INKEY$=114 AND N>1
THEN LET N=N-I
231 IF CODE INKEY$=115 AND N<L
THEN LET N=N+I
232 IF CODE INKEY$=117 THEN GOS
UB 90
233 IF CODE INKEY$=119 THEN GOS
UB 80
240 PRINT AT 20,0;D$(2 TO N);"▓
";D$(N+I TO )
242 PAUSE 4E4
243 IF CODE INKEY$<>118 AND COD
E INKEY$<>112 THEN GOTO 230
244 LET F$=F$( TO P1-I)+D$(2 TO
 )+F$(P2 TO )
245 GOTO 220
300 LPRINT F$
310 STOP
900 SAVE "T▓"
901 LET L=CODE "4"
902 DIM L$(L)
903 LET I=-COS PI
990 PRINT "TEXT WRITER OPTIONS:
",,,"   99   BEGIN NEW TEXT",
100   ENTER TEXT","   200  DISPL
AY FOR EDIT","   300  PRINT",,"
   900  SAVE"
991 PRINT "EDITING:",,,"   EDI
T KEY FOR INSERTIONS",,,"   UP-C
URSOR FOR NEXT LINE"
```

TEXT WRITER OPTIONS:

    99   BEGIN NEW TEXT
   100   ENTER TEXT
   200   DISPLAY FOR EDIT
   300   PRINT
   900   SAVE

EDITING:

   EDIT KEY FOR INSERTIONS

   UP-CURSOR FOR NEXT LINE

The subroutine in 500 to 680 reviews all INPUT and rejects anything that cannot be a valid answer. In other words, it monitors input so that nothing other than positive (or negative) numbers of 2 or more digits get by.

## LONG DIVISION, GRADE SIX

Routine H-35 covers problems in long division and is similar in construction to H-34. The two routines could have been combined and supplied with a menu for choosing which operation to play, but I decided against this. Multiplication is usually taught several weeks before long division. They are not taught concurrently. Hence there is little to be gained by a combination.

It is very easy on the TS2068 to convert one similar program into another, as editing is simple on this computer. Starting with the LISTing of H-34, I altered the following lines....

5, 10, 20, 40, 80, 100, & 120

By comparing them you should be able to discern the particular action taken. But line 120 may need a further explanation. In H-34 we compared the student's response "try" with the computer's "ans", and allowed them to differ by no more than .03 in value. In division the difference is not a good criterion as all of the answers will be small. Therefore we used a ratio in the H-35 routine so that to score correctly, the difference between the two values divided by the computer's value agrees to within 6 significant figures. This requires that the student carry his work out to 6 figures, but it also limits his work to this extent.

H-35 has an added subroutine, lines 1500 to 1540, which generate the traditional division symbol which is not on most computers, including the Timex. This symbol, once generated, can be printed out simply by calling for CHR$ 146, or by the letter "A" in graphics. In this tutorial the graphics letter A was used and the symbol printed in its place. One of the many nice features of the Timex is its ability to mix graphics and text at any time and any where on the screen. Most other computers, operating in basic, cannot do this.

You can use this subroutine in other programs and can add up to 19 additional special symbols. More than 20 can be added but an explanation of the method will have to wait for another day. The first two subroutines can also be incorporated into other programs. They may need to be altered slightly to suit your application.

Warren Fricke

# H-35

```
5 REM ** "I-17", 1-6-90, WF
10 REM ** LONG DIVISION,
        GRADE SIX

20 RANDOMIZE : GO SUB 1500
30 CLS : LET F=0
40 PRINT "You are expected to
be correct in the first 6 signi
ficant fig- ures to be marked co
rrect."
50 FOR I=1 TO 10
60 GO SUB 1000: LET N1=VAL N$
70 GO SUB 1000: LET N2=VAL N$
80 LET ans=N1/N2
90 PRINT '"QUESTION No. ";I
100 PRINT "   ";N1;" ÷ ";N2;" =
";
110 INPUT T$: GO SUB 500
115 LET try=VAL H$: PRINT try
120 IF ABS (ans-try)/ans>1E-5 T
HEN GO TO 150
130 PRINT "    Correct.  Press E
NTER."
140 LET F=F+1: GO TO 160
150 PRINT "    Wrong.  Answer is
 ";ans: PRINT "    Press ENTER."
160 INPUT Z$: NEXT I
170 PRINT '"Your score was ";F;
" out of 10.       Press ENTER t
o play again."
180 INPUT Z$: GO TO 30
190
500 REM ** INPUT MONITOR
510 LET H$=T$
515 IF LEN T$<2 THEN GO TO 560
520 IF T$(1)="+" OR T$(1)="-" T
HEN LET T$=T$(2 TO )
530 GO TO 600
560 FOR T=1 TO 120: NEXT T: GO
TO 110
600 FOR T=1 TO LEN T$
610 IF (T$(T)<"0" OR T$(T)>"9")
AND T$(T)<>"." THEN GO TO 110
620 NEXT T
630 LET S=0
640 FOR T=1 TO LEN T$
650 IF T$(T)="." THEN LET S=S+1
660 IF S>1 THEN GO TO 110
670 NEXT T
680 RETURN
690
1000 REM ** NUMBER GENERATOR
1010 LET A$=STR$ (1+900*RND*RND)
+"000"
1020 LET w=2+INT (6*RND)
1030 LET N$=A$(1 TO w)
1040 RETURN
1050
```

This tutorial demonstrates the simplicity with which a 64K computer can be programmed to provide a no-frill means of developing an unlimited number of multiplication problems for a math practice session of a six-grader. The program LISTing is short and can readily be converted to the basic language of other computers.

One of the biggest drawbacks of most software packages provided by the schools today for their students is that the programs are too elaborately written. Thru these programs the inanimate computers are expected to teach, but they cannot anticipate a child's needs, and are thus very inefficient as a teaching medium. As a consequence students can spend up to eighty percent of their time standing by.... watching crude computer animations, slow developing and fancy picture embellishments, repetitious displays of the credit and introductory screens, unclear menus, confusingly abbreviated instructions, and the like. Much of this rot is created by the programmers and producers of the software, who appear to be more concerned with demonstrating their programming ability than they are the education of the child. The relatively poor grades that students currently are scoring on standard tests, compared to the grades in the years before computers entered the classrooms, is principally due to this inefficient method of teaching. But, computers can be of help in providing a student with practice exercises to follow up on classroom instruction, by a teacher. H-34 is a program written for this purpose.

Routine H-34 does nothing more fancy than to develop two decimal numbers for multiplication on paper by the student who then enters his answer. The computer then checks it and indicates whether it is correct or not.

There are two subroutines in this program suitable for use in other programs. The one in lines 1000 to 1040 generates decimal and integral numbers in the range of 1 to 900+. They are developed as "strings" so that the individual digits can be manipulated. They are then converted to numbers for computation and display.

```
5 REM ** "I-16", 1-6-90, WF
10 REM ** MULTIPLICATION,
          GRADE SIX

20 RANDOMIZE
30 CLS : LET F=0
40 PRINT "You are expected to
be within    .03 of the correct
answer to        be marked correc
t."
50 FOR I=1 TO 10
60 GO SUB 1000: LET N1=VAL N$
70 GO SUB 1000: LET N2=VAL N$
80 LET ans=N1*N2
90 PRINT "QUESTION No. ";I
100 PRINT "   ";N1;" X ";N2;" =
";
110 INPUT T$: GO SUB 500
115 LET try=VAL H$: PRINT try
120 IF ABS (ans-try)>.03 THEN G
O TO 150
130 PRINT "   Correct.  Press E
NTER."
140 LET F=F+1: GO TO 160
150 PRINT "   Wrong.  Answer is
";ans: PRINT "   Press ENTER."
160 INPUT Z$: NEXT I
170 PRINT "Your score was ";F;
" out of 10.        Press ENTER t
o play again."
180 INPUT Z$: GO TO 30
190
500 REM ** INPUT MONITOR
510 LET H$=T$
515 IF LEN T$<2 THEN GO TO 560
520 IF T$(1)="+" OR T$(1)="-" T
HEN LET T$=T$(2 TO )
530 GO TO 600
560 FOR T=1 TO 120: NEXT T: GO
TO 110
600 FOR T=1 TO LEN T$
610 IF (T$(T)<"0" OR T$(T)>"9")
AND T$(T)<>"." THEN GO TO 110
620 NEXT T
630 LET S=0
640 FOR T=1 TO LEN T$
650 IF T$(T)="." THEN LET S=S+1
660 IF S>1 THEN GO TO 110
670 NEXT T
680 RETURN
690
1000 REM ** NUMBER GENERATOR
1010 LET A$=STR$ (1+900*RND*RND)
+"000"
1020 LET w=2+INT (6*RND)
1030 LET N$=A$(1 TO w)
1040 RETURN
```

You are expected to be within .03 of the correct answer to be marked correct.

QUESTION No. 1
    197.9 X 11 = 2176.9
    Correct.  Press ENTER.

QUESTION No. 2
    3.3 X 354 = 1168.2
    Correct.  Press ENTER.

QUESTION No. 3
    144 X 114 = 16514
    Wrong.  Answer is 16416
    Press ENTER.

Omnicalc - wow what a program. I got the 2068 version which supports a full size
printer from Knighted Computers (way back when!). Ok, so I don't get a whole lotta
time to play with numbers. Well, I crunched into it 10 years of income tax forms
and ran comparitive analysis of each years fed, state, and local taxes. Once I got
the formulas correct, it did a great job of telling more than maybe I really want
to know. Clyde Tackley says the graphics will printout if you have your printer
preped before hand. The only way to save this program to disc is by a NMI button.
Suggestion - if you have this program, when setting up, always add 10 extra columns
and rows more than you think you'll ever need. Once you use this and see the simply
amazing power in action, you'll be wantin' to analyze all of your income and
outgo!

Hi and welcome to Bret Gagnon, Florence MA. Welcome back and thank you for renewing
to Jack Deuber, Casselberry, FL and William MacDougall, Willowdale, ONT., James
Curry, Rochester, NY; Joan Kealy, Brackettville, TX, Tony Piombino, Lawtey, FL; M.
Heusevelt, Lantana, FL and Don Lambert, Cedar Rapids, Iowa. If your mailing label
has "LAST ISSUE" under the address, be advised that your subscription is up.

Our subscription rate is $8 per year, please make your check out to "SINCUS". It
looks like the good ole US Postal System is gona jack up its rates, which we need
like a shorted SCLD chip. It may not hurt any to express your feelings on this to
the post office. In light of an increase in postage, we will review our expenses,
and see if there is a way to cut overhead, 5 issues a year in stead of 6, or a
maximum of 5 sheets per letter, or cut out some swaps. Any changes in rates, or
letters per year will go into effect in 1991. Any further renewals accepted after
March 31, 1990 will be affected by the changes forthcoming.

Our annual hunt for nominations for society offices starts again, discussions in
March and nominations in April and followed by elections in May. If you don't show
up you may get elected.

NEW SWAP in town; We have received a couple issues from SEATUG, the Seattle Area
Timex/Sinclair Users Group, the newsletter "SWYM". Hello and we hope you find
SINCUS NEWS as informative as we find SWYM! Newsletter swap in care of Robert
Cazares, 118 N.W. 84th Street, Seattle, WA. 98117-3044

SNUG is alive and well, and in the good hands of the Indiana Group; to do our bit,
we will be sending on disc an index of SINCUS NEWS articles, and disc files of
available past material. This covers newsletters from 1983 to the present. This
shouldn't take more than 1 or 2 months.

NEW - from E. Arthur Brown, remember them folks?, Well, Hal Sohn brought to the
last meeting a recent copy of E25 catalog and on the back page is an offer for the
ZX81 kit for $39.95. They're still at 3404 Pawnee Dr., Alexandria, MN 56308

We have received a VHS tape of a program written by the Albany TSUG, and we planned
on showing it at the Feb 90 meeting. Due to recent construction, scheduling, we
were unable to get the room with the TV/VCR. We are passing the tape thru the
membership, and hope to have it on its way by the first part of March. It is an
interesting program for the 1000, showing the globe turning, and the land masses
moving across the surface.

Howcome it is easier to critize when slighted, than to say nothing?; and to say
nothing when done a good turn?

We have a garage sale! We have been asked to sell on consignment a 10 year collection of things Sinclair and Timex/Sinclair. Most all seems to be in beautiful condition. Like all things at a garage sale, prices are low, and all sales are final. Some of the items may already be sold by the time you get this. If you wish, include alternatives. If your item or items are no longer available, your check will be returned. Thanks for browsing, and note the terms at the end of the sale list.

January 17, SINCUS packed it's kit and kaboodle and headed off to OWEGO, NY. We met at George Penney's "The Hub", and settled in to watch a couple of demos on his recent purchase. He got a discount on an IBM 5110, about a 99.4% discount off the orginial price (circa 1979) of some 38,000 bucs. The setup included a 64K RAM computer, a couple 8" floppies, and one heavy duty printer. The computer housed a 5" screen, keyboard and space for a tape backup. The disc drives were housed in a unit compareable in size to a small refrigerator. Portable this ain't. George has since trained it to work and obey english commands. One does have to remember how one spelled a word the first time however. He is transferring some of the daily tasks from the TS1000 to the capable ibm machine. His 1000, has only a 16KRAM, and a 8K Hunter board, under a Ma Bell telephone operator's keyboard. Some of the keys have Manhattan, Staten Island, and Queens still on them. I wonder where that might have come from. Elsewhere in this issue, George has a printout of his quick and dirty word processor, and more info on his 5110. Thanks George, we all appreciated the demo and the change of venue! It was good to meet and talk with Gary Ennis, and he has invited all of us over this spring to his place for a demo of his video tape printer, index system and whatall. Sounds like fun!

SNUG- Frank Davis, Paul Holmgren and Basil Wentworth have gotten the FIRST issue of the SNUG newsletter off. They have some very worthwhile and interesting projects in mind to better facilitate info between the various computers we love and use. Amoung the ideas, cross compilers, diagnostic software to check out various parts of your machine, "HELP" files and more! SNUG's function would be to suggest and coordinate various individuals working on pieces of the larger puzzle. Comments, ideas and queries send to Mr. Holmgren, 5231 Wilton Wood Ct., Indianapolis, IN 46254. Send a SASE for a reply!

=================================================================

+  -- Meeting DATES -- 1990 --
+  ------ 7pm Vestal Library ----
+      MAR 21 Wednesday
+      APR 18 Wednesday
+      MAY 16 Wednesday
+  Note: ELECTIONS coming up in MAY
+      consider running for an office!
----------------------------------------+
April Fool's Day approaches...remember the + * A couple winter months left - MEET*
6820? I believe the machine was identified + * will be Cancelled if there is a * *
in the '86 Mar/Apr issue of Syncware News. + * * * * SNOW Emergency * * * * * *
=================================================================

Local members note: New addition to the Vestal Library is where we meet. New wing is on the right side of the building as you drive up - if you get lost - check with the main desk or listen for the sound of the disc drives.